

3. help pupils make use of deductive reasoning in areas best suited?
4. provide opportunities for pupils to make summaries of data?
5. help pupils distinguish relevant from irrelevant data?
6. provide opportunity for pupils to make outlines of data?
7. evaluate the pupils' ability to organize evidence on a problem as carefully as you evaluate their knowledge of facts?

D. Interpreting Evidence on Problems

To what extent do you:

1. help pupils select the important ideas related to the problem?
2. help pupils identify the different relationships which may exist between the important ideas?
3. help pupils see the consistencies and weaknesses in data?
4. help pupils state relationships as generalizations which may serve as hypotheses?
5. evaluate the pupils' ability to interpret evidence as carefully as you evaluate their knowledge of facts?

E. Selecting and Testing Hypotheses

To what extent do you:

1. help pupils judge the significance or pertinence of data for the immediate problem?
2. help pupils check hypotheses with recognized authorities?
3. help pupils make inferences from facts and observations?
4. help pupils devise controlled experiments suitable for testing hypotheses?
5. help pupils recognize and formulate assumptions basic to a given hypotheses?
6. help pupils recheck data for possible errors in interpretation?
7. evaluate the pupils' ability for selecting and testing hypotheses as carefully as you evaluate their knowledge of facts?

F. Formulating Conclusions

To what extent do you:

1. help pupils formulate conclusions on the basis of tested evidence?
2. help pupils evaluate their conclusions in the light of the assumptions they set up for the problem?
3. help pupils apply their conclusions to new situations?
4. evaluate the pupils' ability to formulate conclusions as carefully as you evaluate their knowledge of facts?"

Rewards of Quality Teaching. In studying the vast array of material which is being written about the teaching of science, one might conclude that it is impossible for an average person to direct effectively the science activities of secondary pupils for 180 days. Though the task is quite inclusive and though skill is needed to do the job, a person with a good background in the fields he is teaching, with a keen interest in boys and girls of high school age, with an understanding of the important goals in science education, and with an intense desire to do a good job, will find that science teaching can be challenging, fascinating, and successful. If one does not know exactly where to begin, he might start with this idea as expressed by Butler in the book, *The Improvement of Teaching in the Secondary School*, The